

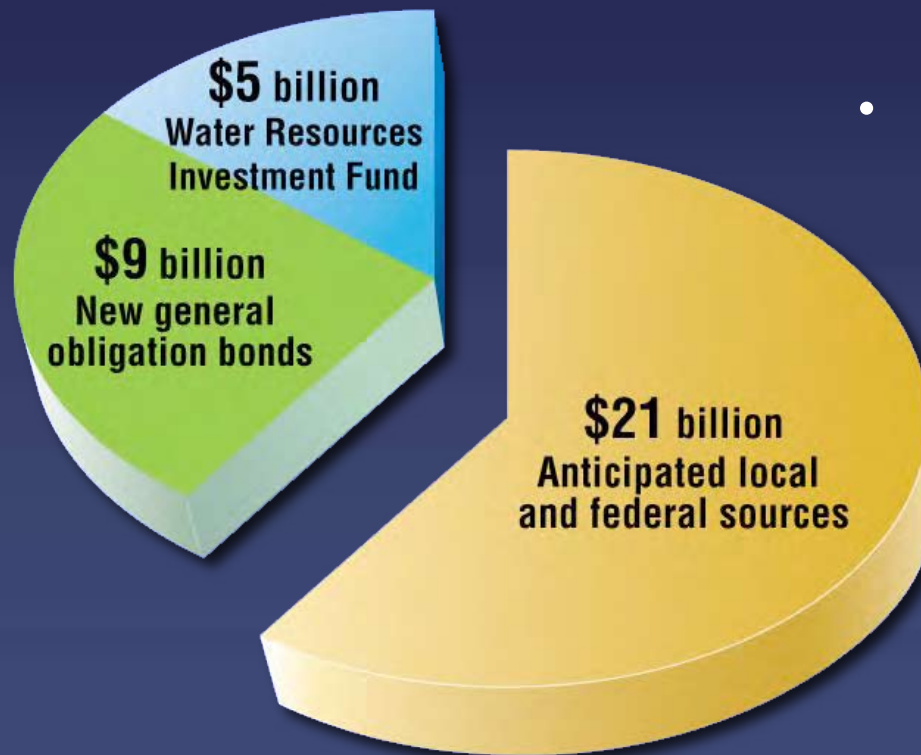
**Senate Natural Resource and Water Committee Hearing**  
January 24, 2006

# **Governor's Strategic Growth Plan**

**Flood Protection and  
Clean, Safe, Reliable Water Supply  
Bond and Financing Acts of 2006 and 2010**

presentation by:  
Lester A. Snow, Director  
Department of Water Resources

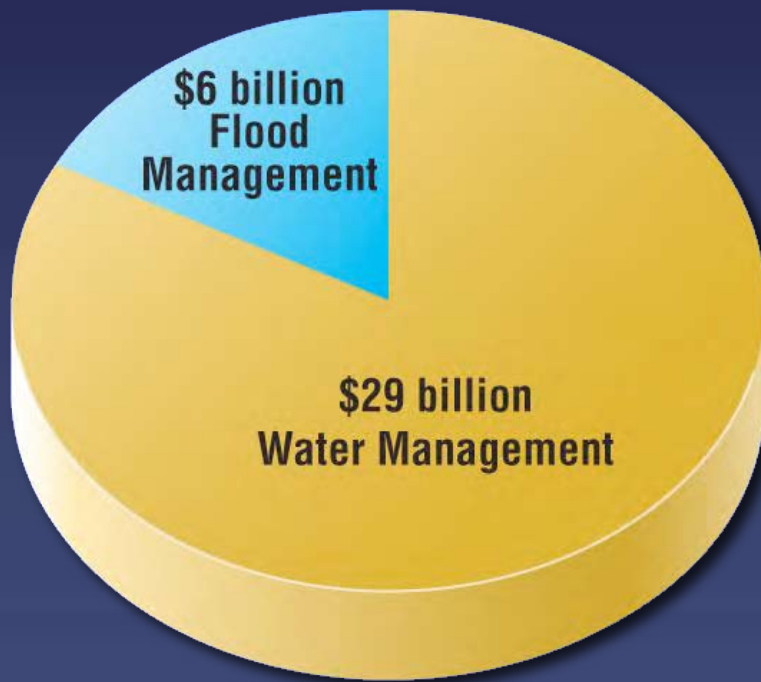
# Building California's Water Future



- Governor's Strategic Growth plan will invest \$35 billion over 10 years
- Responding to population growth and lack of sustained investment strategy

# Building California's Water Future

- Governor's Strategic Growth plan will invests \$6 billion in Flood Management and \$29 billion in Water Management



# Building California's Water Future

- California has specific plans for water quality, water supply, and flood protection
- The Governor's Strategic Growth Plan provides the investment strategy to carry out these plans

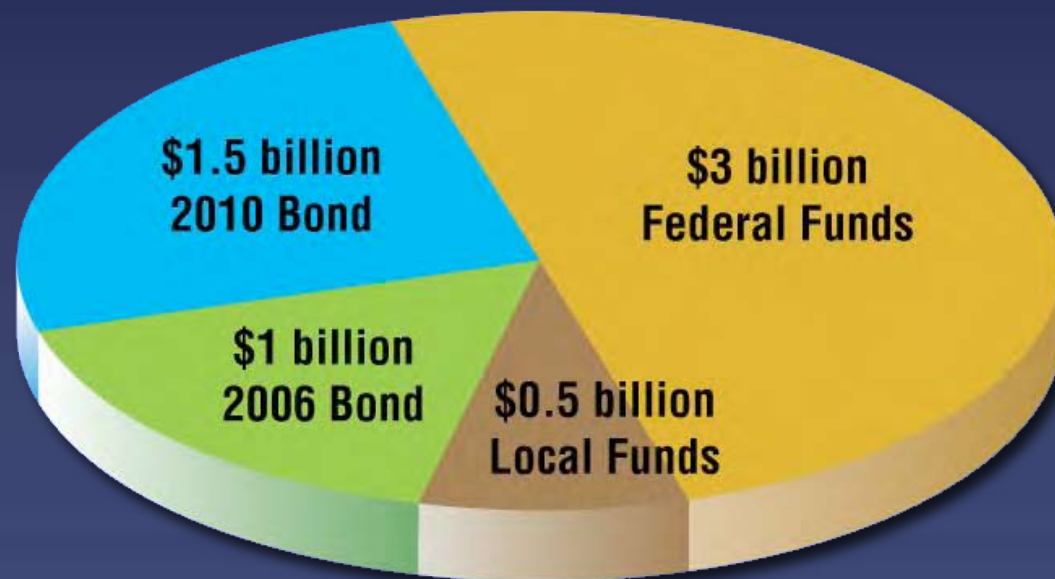


# Building California's Water Future

- Elements of the Flood Protection and Clean, Safe, Reliable Water Supply Bond and Financing Acts of 2006 and 2010 (SB 1166, AB 1839):
  - Flood Protection and Water Supply Bond in 2006
  - Flood Protection and Water Supply Bond in 2010
  - Establishment of a Water Resources Investment Fund
- Bonds will provide:
  - \$2.5 billion for flood management
  - \$6.5 billion for water management

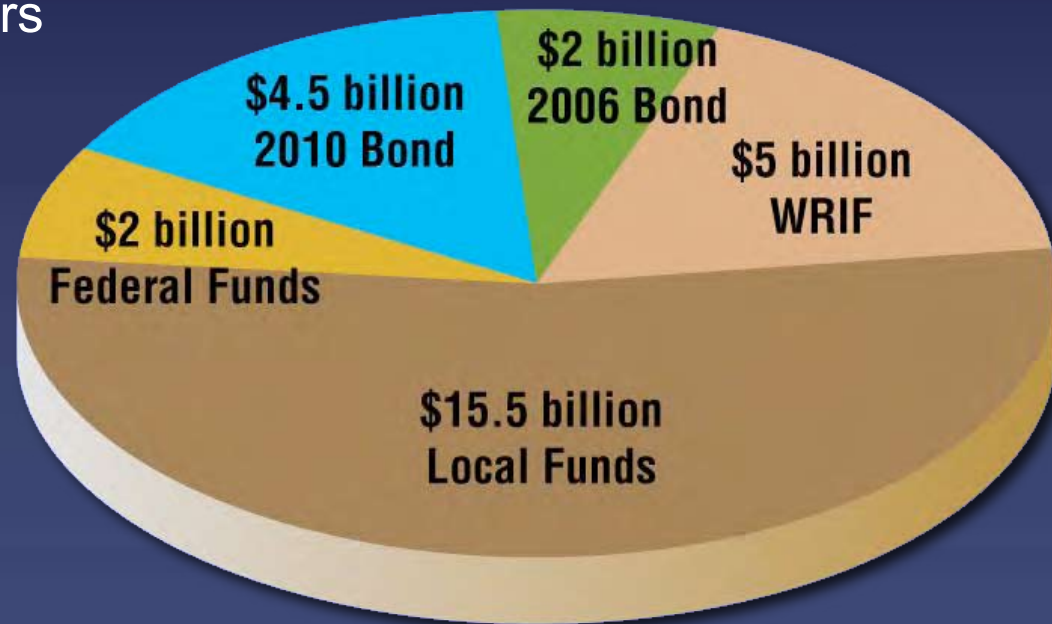
# Flood Management Investments

- Bond funds will leverage other flood investments to total \$6 billion over 10 years



# Water Management Investments

- Bond funds will leverage other water management investments to total \$29 billion over 10 years



# Building California's Water Future

- Water Resources Investment Fund
  - A new source of funding for water management
  - Will ensure that our investments don't fall behind again
  - Two-thirds of the fund supports regional projects
  - One-third supports statewide water management projects
  - Capacity charge paid by every retail water customer
  - About ten cents per day



# Building California's Water Future



- Most WRIF funds support integrated regional water management
- Sustainable source of funding
- Improve water quality and meet water supply needs

# **FLOOD MANAGEMENT**

# **Flood Protection and Clean, Safe and Reliable Water Supply Bond and Financing Acts of 2006 and 2010**



## **Flood Control**

	<b><u>2006</u></b>	<b><u>2010</u></b>
1. Repair of State-Federal Project Levees and Facilities	\$210 million	\$300 million
2. Flood Control and Levee System Improvements	\$200 million	\$200 million
3. Delta Levee Subventions and Special Projects	\$210 million	\$700 million
4. Flood Control Subventions	\$250 million	\$200 million
5. Floodplain Mapping	\$ 90 million	\$ 0
6. Floodway Corridor Program	\$ 40 million	\$100 million
<b>TOTAL</b>	<b>\$ 1 billion</b>	<b>\$ 1.5 billion</b>

# Building California's Water Future

## Protecting California from Devastating Floods

✓ **Bond funds will leverage other flood investments**



### Flood Control Investment over 10 Years:

	State	Federal	Local	Total
1. Repair of State-Federal Project Levees and Facilities	\$ 510 million	\$ 300 million	\$ 30 million	\$ 840 million
2. Flood Control and Levee System Improvements	\$ 400 million	\$ 930 million	\$ 150 million	\$1,480 million
3. Delta Levee Subventions and Special Projects	\$ 910 million	\$ 400 million	\$ 100 million	\$1,410 million
4. Flood Control Subventions	\$ 450 million	\$1,190 million	\$ 190 million	\$1,830 million
5. Floodplain Mapping	\$ 90 million	\$ 0	\$ 0	\$ 90 million
6. Floodway Corridor Program	\$ 140 million	\$ 180 million	\$ 30 million	\$ 350 million
<b>TOTAL</b>	<b>\$ 2.5 billion</b>	<b>\$ 3.0 billion</b>	<b>\$ 0.5 billion</b>	<b>\$ 6.0 billion</b>

# 1. Repair of State-Federal Project Levees and Facilities

**2006 Bond - \$210 million to address deterioration and design deficiencies in Facilities of State Plan of Flood Control:**



- \$ 15 million for Sediment Removal
- \$ 25 million for Facility Repairs
- \$ 50 million for Erosion Repairs
- \$ 50 million for Levee Evaluations
- \$ 20 million for Mitigation Banks
- \$ 50 million for Levee and other Repairs

**2010 Bond - \$300 million to address deterioration and design deficiencies in Facilities of State Plan of Flood Control:**



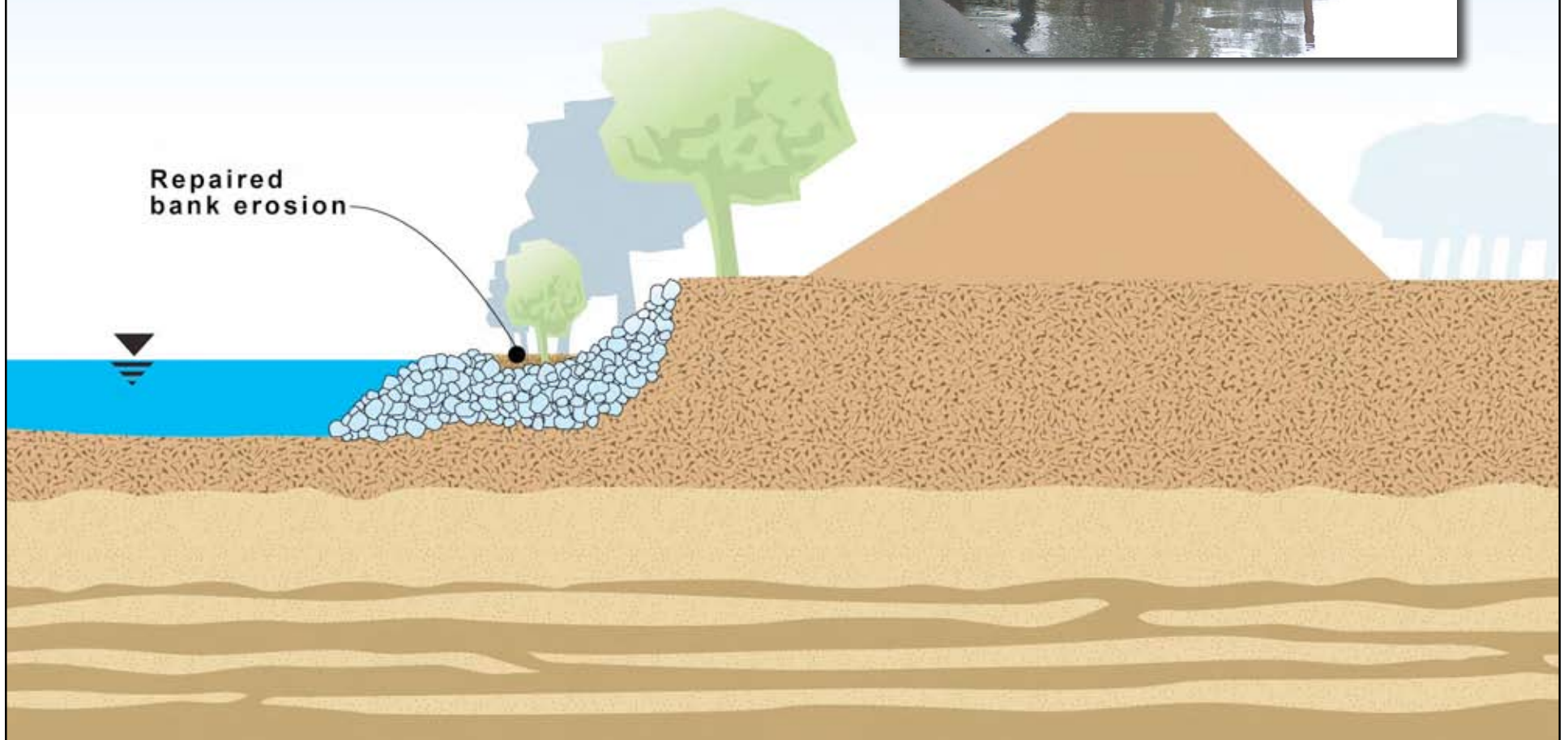
- \$100 million for Erosion Repair and Sediment Removal
- \$100 million for Levee Evaluations and Repairs
- \$100 million for Levee and other Repairs



# Levee and Bank Erosion



# Bank Erosion Repairs





## 2. Flood Control and Levee Improvements

Provides High Levels of Flood Protection for Urban Areas –

*Most of this funding will provide the State Cost Share of a Federal Corps of Engineers Flood Control Project:*

### **For 2006 Bond - \$200 million for the following Projects:**

- \$ 70 million for Folsom Dam Modifications/Raise
  - \$ 25 million for American River Common Features
  - \$ 10 million for South Sacramento Streams
  - \$ 10 million for Enhanced Emergency Preparedness
- \$ 85 million to supplement above repairs  
or be available for other urban areas

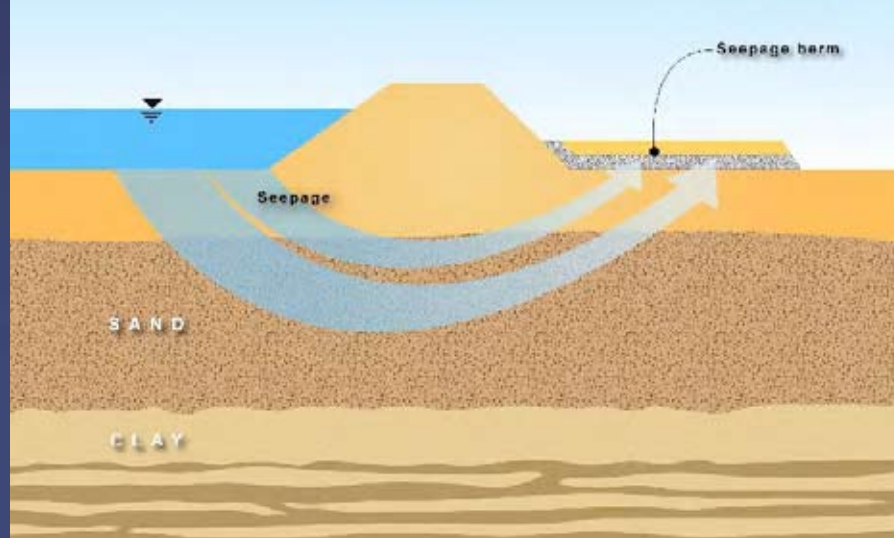


### **For 2010 Bond - \$200 million for State Cost Share to Provide High Levels of Flood Protection for Urban Areas**



# Levee Seepage Repairs:

Seepage Berm



Slurry Wall



### 3. Delta Levee Subventions and Special Projects

For 2006 Bond - **\$210 million:** \$60 million for Delta Levee Maintenance Subventions  
\$150 million for Special Flood Control Projects

For 2010 Bond - **\$700 million:** \$60 million for Delta Levee Maintenance Subventions  
\$640 million for Special Flood Control Projects



## 4. Flood Control Subventions

**2006 Bond** - \$250 million for reimbursement to Local Agencies for State's share of Federal Project Construction *Outside* of the Central Valley

**2010 Bond** - \$200 million for reimbursement to Local Agencies for State's share of Future Federal Project Construction *Outside* of the Central Valley



## 4. Flood Control Subventions

Major projects include:

- Guadalupe River (Santa Clara County)
- Lower Silver Creek (Santa Clara County)
- Napa River (Napa County)
- Santa Ana River (Orange, San Bernardino, Riverside Counties)



Napa, 2006

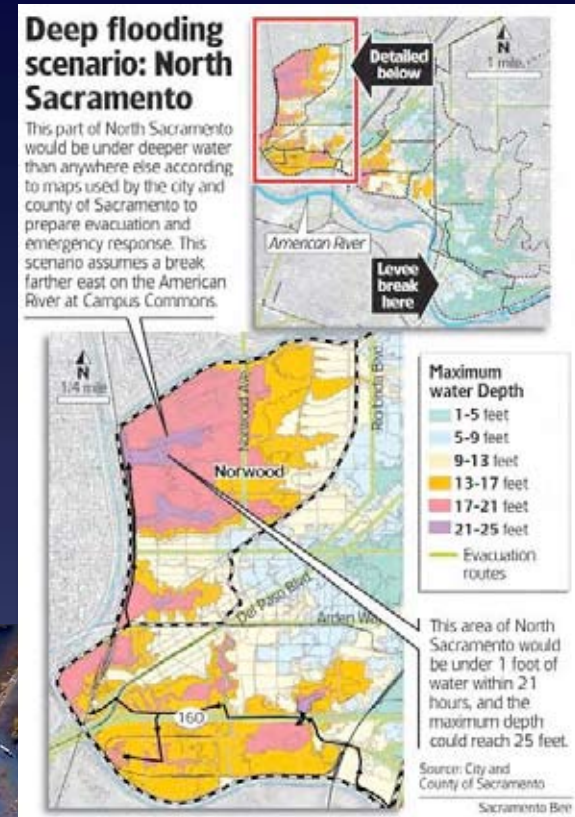
## 5. Floodplain Mapping Program

2006 Bond - **\$90 million for Floodplain Mapping:**

- \$ 87 million for Central Valley
- \$3 million for Alluvial Fans

### Floodplain Mapping Issues:

- Communities Rely on Floodplain Maps in Planning Development
- Current Maps *Woefully Inaccurate*
- To Update Maps, need:
  - Geotechnical data and analyses
  - Recent Surveys
  - Hydrologic and Hydraulic Analyses



## **6. Floodway Corridor Program**

**2006 Bond - \$ 40 million for Flood Corridor Program**

**2010 Bond - \$100 million for Flood Corridor Program**

- **Provides Flood Risk Reduction in Rural Communities**
- **Expands Floodways by:**
  - Building New Levees
  - Setting Back Levees
  - Purchasing Flowage Easements
  - Adding Floodwater Detention Areas
- **In Acquiring Land Rights, Priority is for Easements from Willing Sellers**



## 6. Floodway Corridor Program

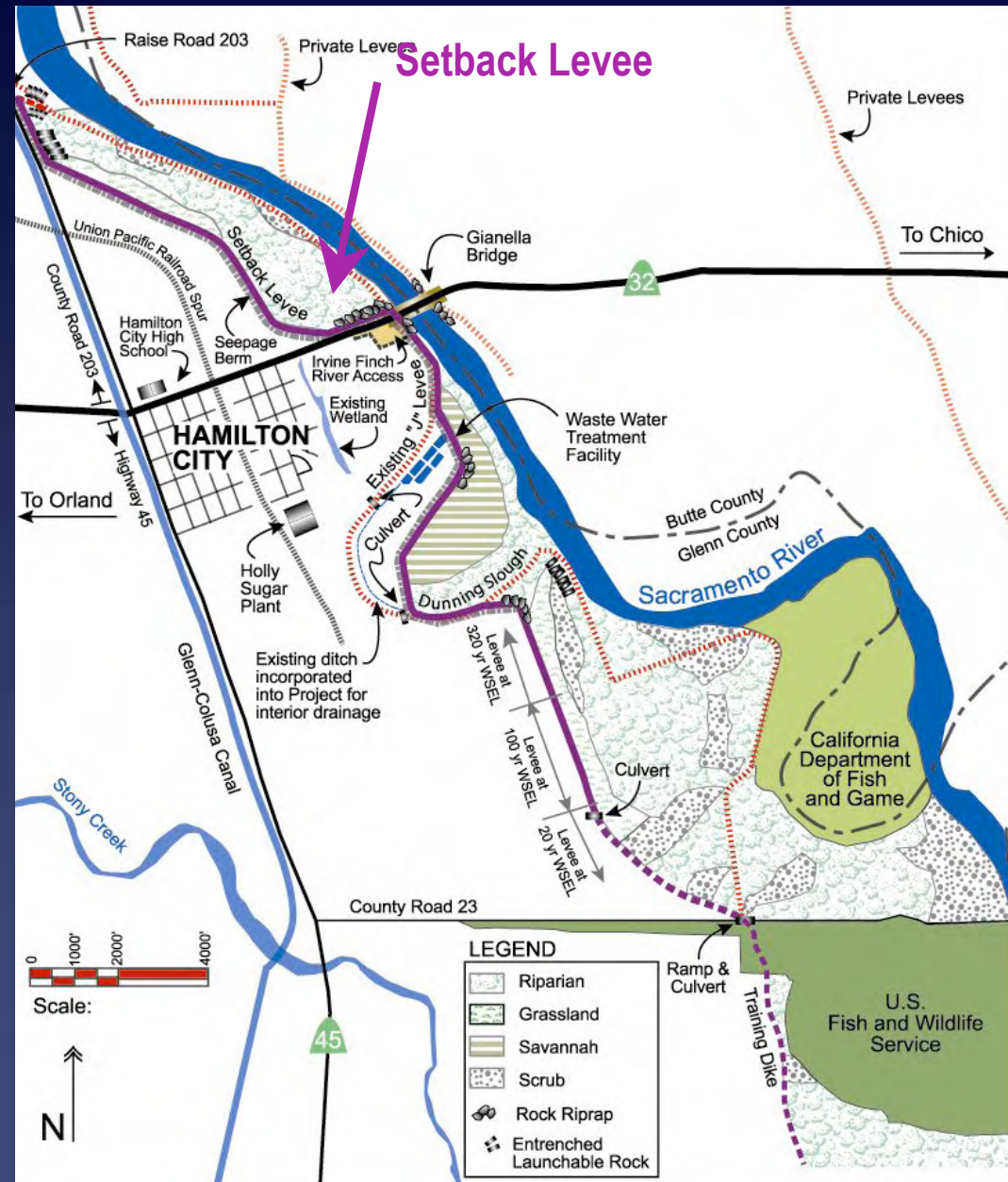
### Hamilton City Flood Damage Reduction and Ecosystem Restoration

- Remove “J” Levee
- Construct 6.8 miles of setback levee
- Provides up to 90% confidence of passing a 75-yr event
- Restore 1,476 acres of native habitat communities

**Estimated Cost: \$44 Million**

#### Cost Shares:

Federal	65 %
State	24.5 %
Local	10.5 %



# Governor's FY 06-07 Flood Management Budget

Complements Bond Proposal by providing an additional \$38.2 million and 32 positions

## Second Year Budget Summary FY 2006-07 Request:

	Additional Funding	Added Positions
Flood Project Maintenance	\$ 13.3 million	14
System Reevaluation and Rehabilitation	\$ 2.1 million	8
Emergency Response	\$ 2.3 million	9
Floodplain Management	\$ 3.0 million	1
Delta Levee Program	\$ 15.0 million	0
Supplemental Funding	\$ 2.5 million	0
	<b>\$ 38.2 million</b>	<b>32</b>

*An Additional \$31 million is provided for Central Valley Flood Control Projects*



# Assembly Bill 1665 (Laird)

- State Plan of Flood Control and System Status Report
- Reports on Local Agency Levee Maintenance
- Notification of Flood Risk and Insurance Availability
- Mandatory Purchase/Offer of Flood Insurance
- Indemnification of State by Local Agencies
- State Abatement of Deficient Local Agency Maintenance
- Mitigation Banking
- Beneficiaries Provide Stable Funding for O&M

# Environmental Permitting and Mitigation

- **State Environmental Requirements Include:**

- California Environmental Quality Act (CEQA)
- California Endangered Species Act (CESA)
- Streambed Alteration Agreements (F&G Code 1600)
- Surface Mining and Reclamation Act of 1975

- **Federal Environmental Requirements Include:**

- National Environmental Policy Act (NEPA)
- Federal Endangered Species Act (ESA)
- Clean Water Act, Including:
  - Section 401
  - Section 404
- River and Harbors Act of 1899

- Compliance with these acts, particularly with the federal ESA and Clean Water Act requirements, is a lengthy and expensive process

# Environmental Permitting and Mitigation

## Initiatives to Facilitate Flood Control Work:

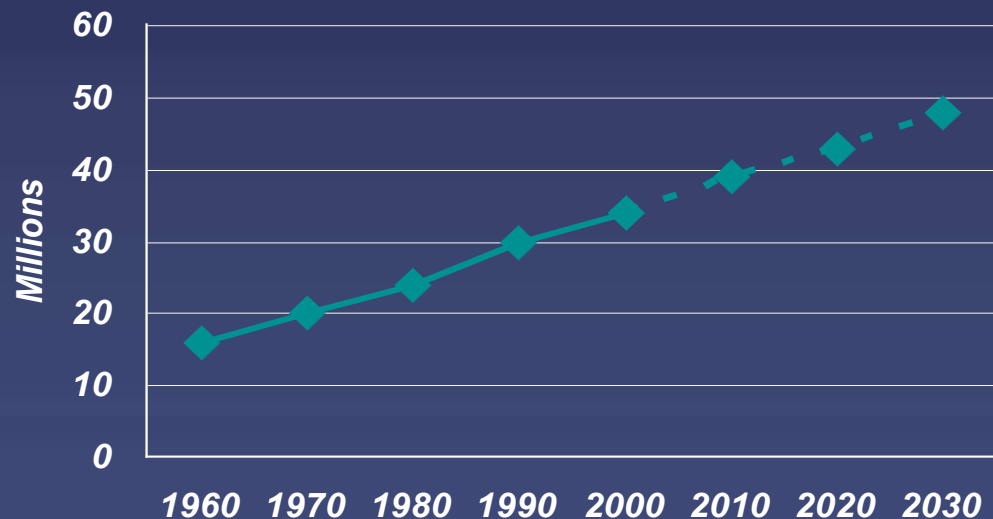
- Interagency Collaborative Process Initiated in 2005
- Mitigation Banking
- Fund Permit Reviews in Resource Agencies (FY06-07 Budget)
- Cost Sharing Multi-Objective Projects

# Water Management

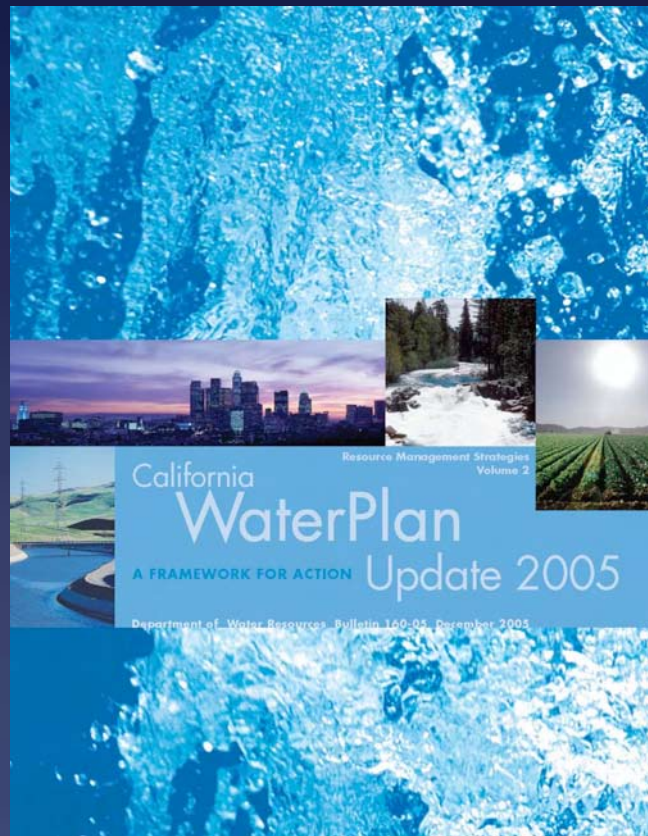
# Future Water Challenges

- Provide for new water needs (primarily in urban sector due to population growth)
- Protect and improve water quality
- Improve reliability and sustainability of water supplies for all beneficial uses

*California Population Growth*



# California Water Plan



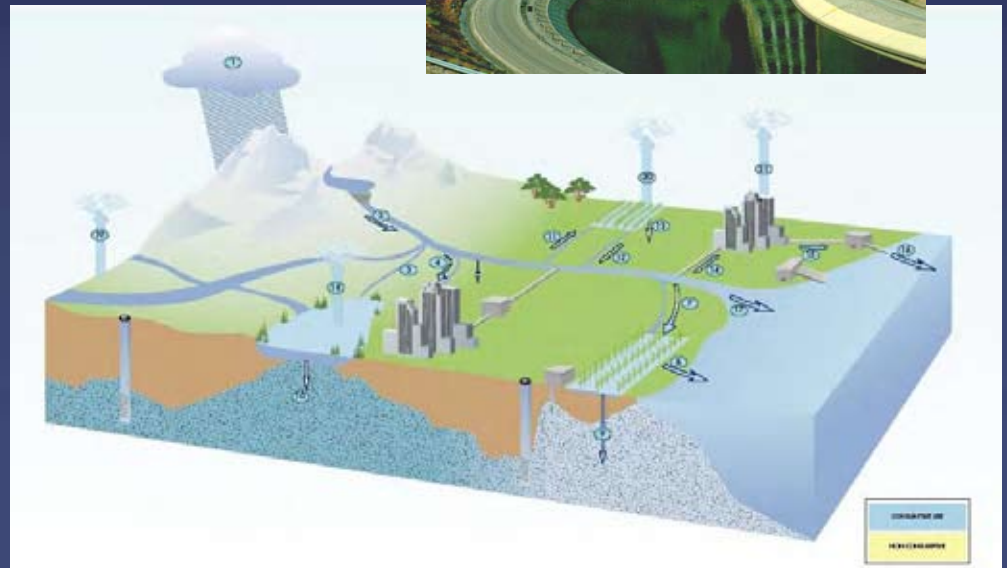
## Key Initiatives:

- Integrated Regional Water Management
- Statewide Water Management



# California Water Plan Approach

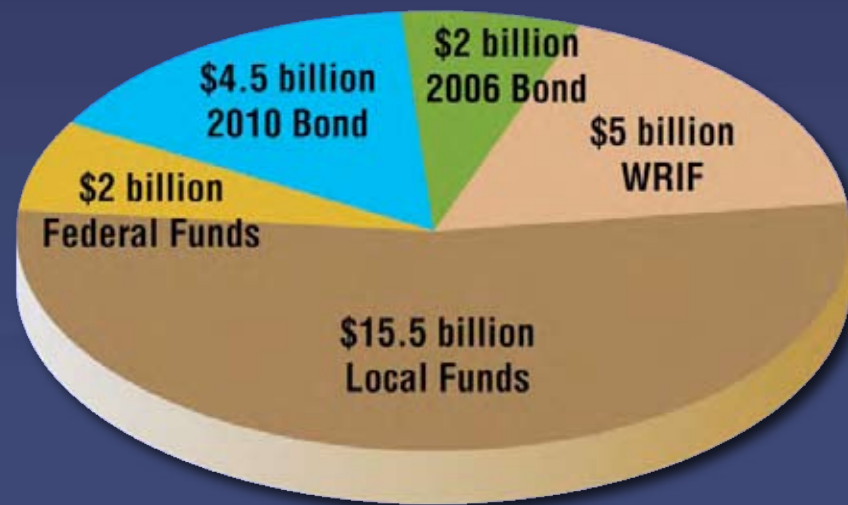
- Maintain existing statewide and interregional systems to provide base supplies
- Promote new regional solutions to provide for future needs:
  - Reduce Water Demand
  - Improve Operational Efficiency & Transfers
  - Increase Water Supply
  - Improve Water Quality
  - Practice Resource Stewardship



# Governor's Strategic Growth Plan

## \$29 Billion over 10 years

- Bonds and WRIF provide stable funding for
  - Regional Investments
  - Statewide Investments
- Bond financing jump starts investments (\$6.5 billion)
- WRIF provides continuous and sustained investments (about \$5 billion)
- Bonds and WRIF create incentive for other local investments and provide cost share to obtain federal matching funds (about \$17.5 billion)





# Water Resources Investment Fund

- A new source of sustainable, continuous funding for water management
- Capacity Change applied to water retailers based on number and types of connections
- One-half of collected funds are deposited in regional accounts to support regional projects and to be used as local match for bond funds
- One-half of collected funds are deposited in a statewide account for:
  - Obtaining federal matching funds
  - Supporting priority regional projects
  - Emergency funding for remediation of groundwater contamination
  - Water infrastructure of statewide significance
  - Other statewide programs that promote IRWM

# Regional Program

## Bond and WRIF Funding

- \$5.5 billion over 10 Years
- Promotes investments in regional projects that local agencies cannot implement individually
- Creates incentive for long term investment strategy
- Provides for proactive rather than reactive investments
- Promotes regional partnerships that provide efficient investment and reduce conflict
- Allows regional prioritization of investments



# Regional Strategies Eligible for Funding

## Reduce Water Demand

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency

## Improve Operational Efficiency and Transfers

- Conveyance
- System Reoperation
- Water Transfers

## Increase Water Supply

- Conjunctive Management and Groundwater Storage
- Desalination –Brackish and Seawater
- Precipitation Enhancement
- Recycled Municipal Water
- Surface Storage – CALFED
- Surface Storage - Regional/Local

## Improve Water Quality

- Drinking Water Treatment and Distribution
- Groundwater/Aquifer Remediation
- Matching Quality to Use
- Pollution Prevention
- Urban Runoff Management

## Practice Resource Stewardship

- Agricultural Lands Stewardship
- Economic Incentives (Loans, Grants, and Water Pricing)
- Ecosystem Restoration
- Floodplain Management
- Recharge Areas Protection
- Urban Land Use Management
- Water-Dependent Recreation
- Watershed Management

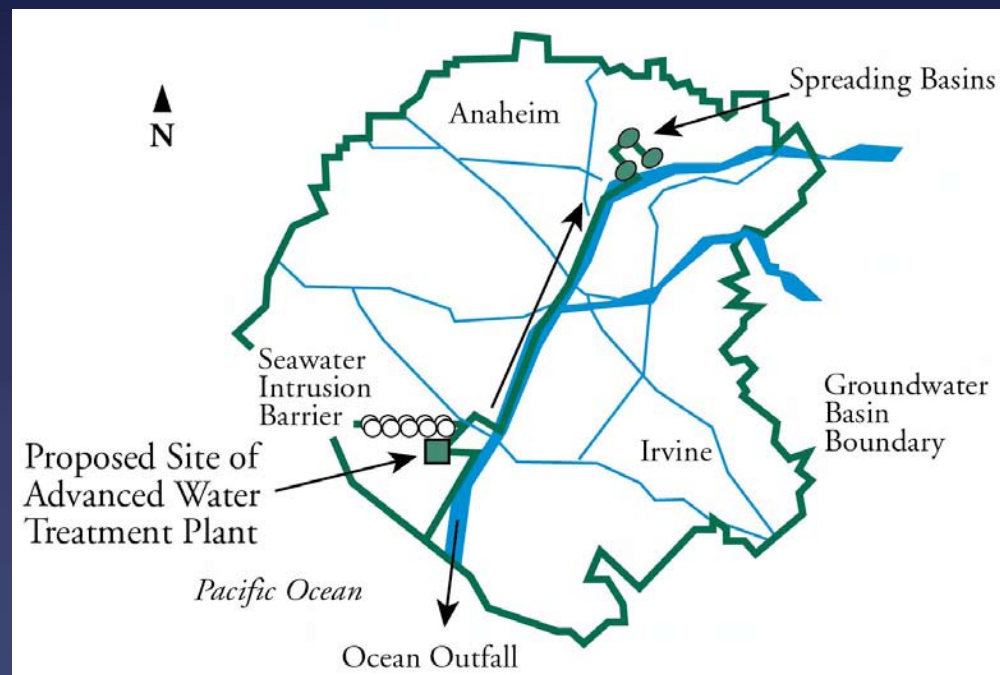
# Example: Orange County Water District Groundwater Replenishment System

## Major Partners

- OCWD
- OC Sanitation District

## Project Benefits

- Provides 72 TAF supply
- Reduces dependence on imported water
- Utilizes investments in existing recharge, pumping and distribution facilities
- Postpones need for new ocean outfall for wastewater
- Enhances GW basin protection from seawater intrusion
- Reduces effluent loading to ocean



# Statewide Program

## Bond and WRIF Funding

- Pools funding to promote better state agency coordination
- Leverages federal funds and backstops regional investments
- Develops new technologies and improves planning for emerging challenges such as climate change
- Provides funding to implement new storage proposals



# Statewide Program

## Bond Funding\* (\$millions)

	2006 Bond	2010 Bond	Total
Water Quality	\$250	\$500	\$750
Storage	\$250	\$1,000	\$1,250
New Technology and Science	\$300	\$500	\$800
Resource Stewardship	\$200	\$500	\$700

*\* Statewide WRIF funding will supplement priority regional projects and these bond funded programs*

# Statewide Program

## Water Quality

- \$750 million in bond funds\*
- Obtain federal match for Safe Drinking Water SRF
- State Water Pollution Control RF
- Remediate groundwater contamination
- Mitigate Impacts of runoff and drainage



*Stringfellow water treatment plant in Glen Avon, California. Part of the Stringfellow Superfund site*

*\*May be supplemented by WRIF funding*



# Statewide Program Storage

- \$1.25 billion bond funds\*
- Complete planning and provide cost share for public benefits of CALFED surface storage projects
- Construct locally-controlled groundwater storage that provides interregional benefits



*Artist's rendering of Sites Reservoir*



*Possible  
location of  
Temperance  
Flat Dam on  
the upper San  
Joaquin River*

*\*May be supplemented by WRIF funding*



# Statewide Program

## New Technology and Science

- \$800 million in bond funds\*
- Advance desalination and water conservation technology
- Construct desalination facilities
- Advance science to improve project implementation
- Prepare for impacts from climate change



*Reverse osmosis desalination*

*\*May be supplemented by WRIF funding*

# Statewide Program

## Resource Stewardship

- \$700 million in bond funds\*
- Restore ecosystems of statewide significance
- Habitat conservation planning and implementation
- Ag land conservation (e.g. Working Landscapes Program)

*\*May be supplemented by WRIF funding*



*Merced River Salmon Habitat Enhancement Project*

# Sound Investments in Water Management



- Sustained investment approach
- Match specific plans for water quality, water supply and flood protection improvements with investment strategy
- Largest investment in state history to maintain and improve flood and water management programs

## Three components of state investment:

- Bonds
- Water Resources Investment Funds
- State Budget Increase

*In Addition, Legislative Initiatives (e.g. AB 1665) will Complement these Investments*